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TABLE No. VIII.—General Abstract.

	Oxford.	Cambridge.	Dublin.	Edinburgh.	Glasgow.	Aberdeen.	St. Andrew's.	Dumfries.	London.	Durham.	Total.
Professorships . . . No.	24	24	20	30	19	21	12	10	52	2	214
Lectureships . . . "	8	25	9	..	2	2	1	..	7	7	59
University Offices . . . "	37	20	9	*10	*11	*6	*7	*7	..	6	115
College Offices . . . "	199	179	10	1	3	2	2	1	2	5	404
Fellowships . . . "	557	431	25	..	..	..	..	..	..	..	1,013
University Scholarships . . . "	26	26	..	..	..	..	..	..	..	27	79
University Fellowships . . . "	2	a 2	..	..	..	..	..	..	..	..	4
College Scholarships . . . "	399	793	70	80	71	240	72	..	..	..	1,725
Bursar-ships, &c. . . . .	..	..	..	..	..	..	..	..	..	..	..
Members on Books or Boards	5,264	5,575	1,624	b*2,267	1,279	640	327	..	..	220	17,196
Members of Convocation or Senate	2,646	2,663	..	*32	*21	*23	14	10	..	105	5,514
Colleges	24	17	1	1	1	2	2	1	2	1	52
University Benefices:											
Number No.	8	2	..	..	..	..	..	..	..	..	10
Incumbents	8	2	..	..	..	..	..	..	..	..	10
Value £	2,400	600	..	..	..	..	..	..	..	..	3,000
College Benefices:											
Number No.	455	311	31	..	..	2	..	..	..	..	799
Incumbents	430	280	31	..	..	2	..	..	..	..	743
Value £	136,500	93,300	9,300	..	..	290	..	..	..	..	239,390
University Prizes:											
Number No.	7	16	*16	..	..	..	..	..	..	..	39
Value £	160	342	..	..	..	..	..	..	..	..	592
College Prizes:											
Number No.	..	251	*17	*100	*100	*70	*100	..	..	..	*638
Value £	..	1,038	..	..	..	..	..	..	..	..	*1,038
Revenue:											
Professors & Lecturers . . . £	5,400	5,500	4,000	18,600	11,630	5,522	3,456	3,220	..	1,350	*58,678
University Officers . . . "	3,000	2,000	..	650	120	..	60	..	..	..	*5,830
College Officers . . . "	15,650	17,750	20,000	..	..	..	..	..	..	..	*53,400
Heads of Houses . . . "	18,350	12,650	2,000	151	455	600	545	292	..	..	35,043
Fellows	116,560	90,330	25,400	..	..	..	..	..	..	..	232,290
University Scholarships . . .	1,188	1,300	1,000	..	..	..	..	..	..	*880	4,368
College Scholarships . . . "	6,030	13,390	2,100	1,345	1,287	3,194	884	..	..	..	28,230
Total Revenue:											
Colleges £	152,670	133,268	31,500	888	9,406	3,479	4,097	3,220	..	..	338,528
Universities	22,000	16,000	..	22,300	3,511	3,479	297	..	..	2,230	69,817
Colleges & Universities . . .	174,670	149,268	*31,500	23,188	12,917	9,496	4,394	3,220	..	2,230	410,683

a Travelling Bachelors.

b Scotch Returns for 1829.

c Ibid., pp. 310, 343.

On the state of Agriculture and Condition of the Agricultural Labourers of the Northern Division of Northumberland. By L. HINDMARSH, Esq., of Alnwick.

[Read before the Statistical Section of the British Association, 21st August, 1838.]

NORTHUMBERLAND has long been an important and interesting portion of the kingdom. In feudal times it was often the arena of fierce contentions, and its ancient inhabitants depended for protection chiefly upon their swords. How much of that mental energy and vigorous character for which Northumbrians have long been distinguished is attributable to the influence of these stirring periods of their history, it may be difficult precisely to estimate; but in some degree, doubtless, they have contributed to their formation or increase. There is no

process through which human beings pass that does not leave some impress on the mind and character, and it is often in events sequestered in the remote recesses of the past that the philosopher traces the first germinations of the great phases of mental constitution. But, however interesting and seductive, this inquiry is foreign to our present object. We rejoice in the facts without exploring their causes, and especially do we rejoice that this characteristic vigour has long since taken a peaceful direction. In the culture of the soil it has found an ample and useful sphere of operation, and the present race of Northumbrians has become as distinguished in the use of the ploughshare as the ancient inhabitants were in the use of their swords. In this paper our object is to present to the Section a general view of the state of its agriculture, and of the condition and character of the agricultural population.

Area.—The entire county of Northumberland (including North Durham) comprehends an area of 1980 square miles, or 1,267,200 acres, which has been divided as follows: *—

Arable, or fit for tillage (including wood and coppice) .	817,200 Acres.
Mountainous and improper for tillage.	450,000 ,,
	<hr/>
	1,267,200 ,,

Population.—The number of inhabitants in 1831 (including North Durham) was 237,431, and this year may be estimated, according to the last rate of increase (1·2 per cent. annually), to be 257,374. Since the passing of the Reform Act, Northumberland has been divided into two parts, northern and southern, the former of which (being solely an agricultural district), shall form the basis of the following observations. In 1831 the population of the northern division of Northumberland amounted to 80,739, and according to the last rate of increase (5½ per cent.†) may now be computed at 85,178. According to the Property Tax Returns of 1815, the value of property was 590,665*l*.

Soil.—That tract which borders upon the German Ocean is mostly a fertile clay loam, well adapted for the growth of wheat and of other kinds of grain. Three or four miles west from the coast, this runs into a poor moist loam on a clay subsoil, which, extending a few miles west, very generally terminates in a ridge of green moor-land or of heath. Then we have the fertile valleys of the Coquet, the Breamish, the Till, and the Beaumont, which, with the base of the Cheviot, and the fine expanse of land from Wooler to the Tweed, are nearly all a fertile gravelly, or sandy loam, admirably adapted for the growth of turnips and corn. The hill-pastures, commencing at the head of the Coquet, and sweeping round by the Cheviots to the Beaumont, are covered with fine green verdure, and rear the Cheviot sheep to the greatest perfection.

Climate.—The climate is very variable and generally humid, which causes this district to be so well adapted for the growth of grass, turnips, and other green crops that require moisture. The spring months are generally chilled by piercing easterly and northerly winds, and it is seldom before the month of June that the southern and western breezes steadily set in, and vegetation receives the full benefit of their genial influences. The snow rarely lies long near the coast, or on the fine dry gravelly soils, but some patches often remain upon the Cheviot (as was the case this year) till June. The mean temperature of the year in

* *Vide* Bailey and Culley's Report.

† Or ½ per cent. annually.

this county may be taken at 47·65, being about 37·50 in winter, 49·00 in spring, 63·10 in summer, and 51·65 in autumn. The harvest may be considered as a month later than in the south of England.

Size of Farms.—The size of tillage-farms generally varies from 150 to 1000 acres, and of hill-farms from 500 to 5000. Some are beyond these extremes both ways, but these limits will comprehend the greater portion of them. In the northern part of the district large capitals are embarked in farming, a few tenants occupying land to the rental of 3000*l.* or 4000*l.* a year.

Rents.—The rent of tillage-land varies widely, from difference of fertility, proximity to markets, and other causes which affect its value. The range may be assumed to be from 10*s.* to 50*s.* per acre, and the average at 21*s.* per acre. Of hill-pasture the variation in rent may be taken from 1*s.* to 6*s.* per acre, and the average at 2*s.* 6*d.* per acre. These rents are considerably below their range during the last war, but, compared with the prices of produce, are probably higher at present than at any former period. This can only be attributed to increased skill, and more profitable management on the part of the farmer.

Mode and Terms of Letting.—Farms are usually let by tender or proposal, excepting with an old tenant at the expiration of his lease, who is generally treated with privately. It was formerly not uncommon to grant leases for 21 years, but latterly very few have been extended beyond 12 or 14 years, and many have been for a shorter period. The occupiers are anxious that the process of curtailing the term of leases should not go further; for they consider nothing more conducive to the improvement and proper culture of the soil than the security and encouragement derived from leases of 14 years and upwards. To the practice of granting leases the Duke of Northumberland's custom is an exception; his estate being let from year to year, with half a year's notice previous to quitting. The tenants upon his estate have, however, all the advantages of leases without their disadvantages, for so long as they pay their rents and fulfil their covenants, no tenant is ever dispossessed of his farm: and in case of death, it is the rule to offer the farm to the eldest son. In the high character and noble-mindedness of their landlord, the tenants feel that they are secure of their tenancy for life, and therefore hesitate not to make every improvement within their means.

Time of Entry.—The time of entry is generally on the 12th of May, the out-going tenant has the away-going crop of corn, and the in-coming tenant for the first year has the grass and fallow quarter. The in-coming tenant has the use of the house and offices, and the out-going tenant has one or two cottages for himself or servant, and the use of the barn for thrashing the away-going crop. The time of entry on the Duke of Northumberland's estate is the 25th of March, the out-going tenant has no away-going crop, and the in-coming tenant pays for the wheat that has been sown, the grass seeds, and the working of the land. A half-year's rent on all farms is allowed to be in arrear, so that the tenant is one year in occupation before he pays any rent. The tenants on the Northumberland estate consequently get a crop of corn before they have any rent to pay, which renders less capital necessary for the commencement of their farms than for others on the general system, and induces keen competition for them whenever any are offered to the public.

Farm-Buildings.—The farm-buildings in this district are mostly

built of stone, and those that have been recently erected are generally covered with blue slates, and, in extent and completeness of arrangement, may vie with any in the kingdom. The modern cottages are built of the same materials, and evince a considerable degree of neatness and taste; but the great proportion of the cottages in this district are old poor-looking buildings, covered with thatch, and containing one room on the ground-floor, from which a sort of lobby, which serves for a back-kitchen and lumber-room, and sometimes as a stall for a cow, is taken off by the partition of the close beds universally found in them. The interior, however, is generally tolerably well furnished with the requisites of humble life, and often exhibits a degree of comfort which the exterior does not promise.

Rotation of Crops.—Upon the fertile loams near the coast, the general course of husbandry is—

1st year, fallow or turnips.	3rd year clover.*
2nd „ wheat or barley.	4th „ oats.

This system can however only be followed with advantage when the land is of superior quality, or an opportunity exists of obtaining seaweed or other extraneous manure. Upon the light turnip soils, remote from the coast, the usual rotation is—

1st year, turnips† or fallow.	3rd and 4th year, clover.
2nd „ barley or wheat.	5th year, oats.

This is termed the five-course system, and seems the only one that can long be pursued on these soils without the aid of artificial manures. On some of the weak light soils it is not uncommon to allow them to remain three or four years in grass, which contributes much to their re-invigoration and subsequent fertility.

Agricultural Practice.—The land in this district is all ploughed with iron swing ploughs, drawn by two horses yoked abreast, except in the first or second ploughing of strong fallow land, when three or four horses are sometimes employed. An acre per day may be considered the average work of a two-horse plough, which is driven and held by one man. When three or four horses are put in, it is customary to have a boy or woman to guide the fore horses. The fallow quarter is commonly ploughed once before winter, to expose it to the ameliorating influence of the frosts. In the spring that portion of it intended for turnips or potatoes is again ploughed two or three times, and harrowed and rolled until it is sufficiently clean and fine for sowing and planting. The naked fallows intended for winter wheat are ploughed three or four times during the spring and summer, and the manure is generally laid on before the two last ploughings. When the season suits, October is the principal time of putting in the winter wheat, which is usually pickled, and sown broadcast. The grass seeds are sown amongst the young wheats in the months of April and May. Barley (with a small portion of wheat) is sown in the spring after turnips, and a considerable proportion is drilled or ribbed. Beans are mostly drilled, but oats, being the usual crop after clover, are sown broadcast. In this district rye is scarcely ever used as an article of food, and is very little cultivated.

* Occasionally beans are substituted for clover in the third year, and then the land is generally fallowed immediately afterwards, and thrown into the seven-course system.

† Very little turnip-land is fallowed.

Turnips are all drilled at intervals of about 26 to 30 inches. The manure (from 15 to 25 single-horse loads of dung per acre) is laid between the first-made drills, which are afterwards split in, and the turnips immediately sown upon the top of the newly-formed ridge or drill. Great care is previously taken by carting out and turnings, to have the manure well rotted. The use of bones as an artificial manure was first practically tested in this district in the year 1811 by two or three farmers, who imagined one ton per acre to be the requisite quantity. Within the last seven years the quantity of bone manure that has been used in the northern and western parts of this county has very greatly increased, and the usual weight per acre now laid on is about 7 cwt., or 16 bushels, reduced by grinding to the size of half-inch or dust. The usual mode of applying it is to sow it between the ridges by a machine, and then to split them in, according to the mode adopted where manure is used. A machine for depositing the bones and sowing the turnip seed at one time has been partially used, but the former is the most general mode. Animalised carbon (manufactured by Mr. Owen, of Copenhagen) has also been used upon a small scale. The following experiments upon the efficiency of these manures, in rearing turnips, were made by Mr. Chrisp of Hawkhill last year:—

1. Fold-yard manure (led out after Christmas and turned in spring), at the rate of 30 loads per acre—quantity of land not stated, but the same in each experiment produced turnips . . . }	Cwt.	qrs.	lbs.
	4	2	12
2. $\frac{1}{4}$ ton of carbon, value 12s. 6d., mixed with 8 bushels of bone-dust, value 23s., in all 35s. 6d., produced . . . }	5	0	26
3. 16 bushels of bone-dust, value 46s. }	5	2	11
4. $\frac{1}{2}$ ton of carbon, value 25s. }	5	2	16

Subsoil ploughing has not been practised to any large extent in this district, but much has been done of late years by draining; and if the system adopted by the Duke of Portland, of thorough draining his strong lands, and charging an acreage, were generally followed by landlords, the improvement in the productiveness of cold retentive soils would be incalculable.

Upon the good fertile loams and turnip soils the average produce per acre of wheat may be taken at 30 bushels; oats 44; barley 39; beans 30. Upon the poor clay soils the crops may be estimated from $\frac{1}{3}$ to $\frac{1}{2}$ less.

The reaping is performed chiefly by the sickle: and seven women, with a man to bind after them, usually reap two acres per day. The wheat is bound as it is cut, and set up in stocks of 12 sheaves each. Barley and oats are set up in single sheaves, provincially termed "Gatens," and as they dry are bound tightly near the bottom, and then put into stocks. Thrashing-machines are nearly universal, and most of those upon large farms are propelled by water or steam.

Cattle and Sheep.—Intimately connected with the successful prosecution of agriculture in Northumberland is the large proportion of cattle and sheep reared and fed upon the tillage-farms. Through them the soil is enriched, and manure provided for the corn-crops. The cattle are nearly all of the short-horned Durham breed, and spirited efforts are now being made for their improvement. The sheep upon the tillage-farms are nearly all improved Leicesters, or a cross between them and

the Cheviot breed. Upon the hill-pastures the Cheviot sheep prevail. The total number of sheep throughout the entire county may be estimated at 540,000, and the annual produce of wool at 10,125 packs, of 240 lbs. Two-thirds of these sheep may safely be estimated to belong to the northern division of the county.

Comparative Fertility of Soil.—In a country with a rapidly increasing population, like our own, it becomes a subject of deeply interesting enquiry whether the mode of culture at present and for some time pursued is accompanied with an increase or decrease in the fertility of the soil; and it is pleasing to be able to state, with reference to this district, that the universal opinion is in favour of a considerable increase in the productiveness of the soil since the commencement of the present century. This is attributable, probably, not so much to any one particular improvement, but to a general increase of skill and intelligence amongst agriculturists, leading them to a proper rotation of crops, a judicious application of manures, a careful selection of seed, a more complete clearing of their lands, and to a more careful general management. On comparing the present state of the agriculture of this district with the past, we are ready to admit that, in the times of Bailey and Culley, there were a few individuals nearly as far advanced in their profession as any now are; but knowledge was not then so generally diffused, and the great body of the farmers were inferior in skilful practice to the present race. It may, however, be admitted that the progress of agriculture during the last 30 years has not been so rapid as the indications of the times of Bailey seemed to promise, and it has certainly not been equal to the improvement which has been made within the same period in manufactures. This, perhaps, may in some degree be accounted for by that period of agricultural distress which was consequent on war rents and peace prices; but within the last few years there has been a revival of the spirit of improvement and emulation, which bids fair to produce important and gratifying results. The formation of an agricultural society, excluding politics, and under patronage calculated to render it permanent, is at once the fruit and the promoter of this spirit; and nothing seems wanting but a public experimental farm and a periodical journal to disseminate the knowledge of agricultural experiments and facts, to render this institution a powerful engine of improvement. Upon the minds of the rising generation of agriculturists especially it must exercise a most beneficial influence, by early directing their attention to scientific and experimental enquiries.

Though the Northumberland farmers are professionally clever and skilful, there is but a small portion of them that can strictly be considered scientific men. They are skilful in the practice more than in the science of their profession. They are mostly matter-of-fact men, whose skill is a collection of facts in their own experience and that of their neighbours, applied in daily practice by shrewd minds, without knowing the principles which give to these facts all their efficiency and importance. Thus their range of vision is limited, the whole bearing of these facts is unseen, and important truths which are involved in them are undiscovered. Here this want of a scientific education is felt by many excellent farmers; but in this point the next generation, it is hoped, will be much improved. Many of the sons of the larger farmers

are sent to public schools, and receive an education fitted to the important station for which they are destined ; but the sons of the smaller farmers must still suffer in this respect, until the system and range of country education is improved and widened.

Education.—The northern portion of Northumberland has but few endowed schools, and those not of a high character ; neither are there any public boarding-schools of much note. Education therefore is mostly conducted in common day-schools, and in charity-schools supported by the benevolence of private individuals.

The statistics of education in the town of Alnwick, which is entirely a country town and devoid of manufactures, may probably be taken as a fair average specimen of the state of education in the northern division of Northumberland, as although there are always more of the very poor to be found in towns than in small country villages, the borough free-schools and the charity-schools supported by the munificence of the Duke and Duchess of Northumberland would seem to counterbalance this preponderance. They are as follow :—

Estimated Population of Alnwick . . . 7358		
	No. who Attend.	Per-Centage Proportion.
Superior Private Schools	100	1·37
Common Day-Schools	205	2·81
Free and Charity Schools	453	6·21
Dame-Schools	74	1·1
	832	11·40
In Sunday-Schools, and not in any Day-} School, estimated at }	142	1·94
	974	13·34*

In Chillingham, where the population is 487, the average number under education at the only day-school in the parish is 80, being 16 per cent., or 1 in 6 of the population. The education given in these schools is such as commonly belongs to institutions of their class. In the superior private schools, in addition to the common branches of learning, the languages are taught. In the day-schools reading, writing, English grammar, geography, arithmetic, and the elements of mathematics, and in the dame-schools reading and needlework. In the Sunday-schools religious instruction is added to reading, which renders them an invaluable accession to the cause of education. Before quitting the subject of education in this district we are compelled to confess that, although the rudiments of useful learning are taught in an efficient manner, the range of instruction, as in most other rural districts, is very limited. How long reading, writing, and ciphering will continue to receive the name of education we will not predict ; but the time must come when the training of children shall have a more full relation to the business, duties, and happiness of life. They shall then be taught not only the symbols of knowledge, but the elements of those useful arts and sciences which are likely to be connected with their future employments, and above all they will be made acquainted with the powers of their own nature, and with those laws, physical, mental, moral, and religious, the observance of which is, by their Creator, rendered necessary to their happiness.

Condition of Agricultural Labourers.—The character of the agricultural labourers in this district has long stood, and continues to stand,

* Equal to 1 in 8 of the population.

pre-eminently high as a moral, industrious, and orderly class of society. Whilst many southern counties have been deluged with pauperism and crime, the peasantry in the northern division of Northumberland have been comfortable, quiet, and contented. The causes of this striking difference merit investigation. The first that presents itself, in reference to the hinds, is their term of hiring, with the amount and the mode of their payment. The hinds are hired for 12 months, and are paid partly in kind, and partly in money; which system, by providing constant employment and a certain supply of food, gives birth to settled habits and a condition of comfort. The terms of a hind are generally as follow:—

Grass for a cow in summer, with $1\frac{1}{2}$ tons of hay and straw for its winter-food; a cottage and garth rent-free; coals led, and 1000 linear yards of potatoes set; 6 imperial bushels of wheat; 24 bushels of barley; 36 bushels of oats; and 12 bushels of beans; with 3*l.* to 4*l.* in cash.

For this he gives his own labour for 12 months, and agrees to find the farmer either one of his own family or a female servant as an out-door worker, whenever he may require her, at the rate of 8*d.* per day in winter, 10*d.* in summer, and 1*s.* 6*d.* in harvest. This latter condition is what is called the “bondage system,” and which, by a recent writer, has been unfairly compared to West Indian slavery; for those who labour under the name of bondagers are no more slaves than are the hinds who hire for 12 months, or the housemaid who engages for a half-year’s servitude. The farmer hires the hind—the hind hires the servant, on condition of her working for the farmer when he wants her labour, and all is the subject of voluntary contract, which effectually excludes the idea of slavery.* If, indeed, extended contracts of servitude made voluntarily involve the principle of slavery, then does any hiring beyond the present instant of time effectually involve it. When the term of agreement is ended the hind and his servant are both free to make fresh contracts, or none, as they think proper, and that without certificates of character from their master and clergyman. The name, however, in its popular meaning, though, perhaps, not in its etymological sense, is unhappy, and ought certainly to be exchanged for some other more appropriate and expressive. Let them be called “out-door workers,” or anything but bondagers—a name in its common acceptation ungrateful to a British ear.

From the difficulty of procuring servants, and the high wages demanded by them, the hinds have long disliked the system; and in the year 1837 a combination was formed for its extermination, which, although it produced an advance in the wages allowed by the farmer to the servants, failed in its main object. Considerable excitement prevailed, but, to the credit of the hinds, it was unaccompanied by violence or outrage. The farmers generally opposed any change of system, under the idea that without tied out door workers, upon whom they could at all times depend, the proper culture of their farms would not be secure. There appears considerable force in this reason itself, but there seems to be some fallacy in connecting this desideratum inseparably with the old system. Most of these female servants, or bondagers, are the daughters of hinds, and if the bondage system were

* This voluntary contract is implied in the word “conditions,” which is used to denote the wages of labourers under the bondage system.

abolished they would still remain as labourers, ready to serve the farmer at fair remunerating wages. The principal change would be that they would be resident in the family of their parents instead of those of strangers; and the hind would no longer continue to receive a part of their wages in his own "conditions," but each party would get the full amount, and nothing more, of their own distinct remuneration. Those farmers who are remote from villages would endeavour to get hinds with families able and willing to meet the necessities of their farms; the hind and his family would be hired at distinct, and, in both cases, full wages, and the object of providing a regular and certain supply of out-door workers would be as effectually attained as by the present mode.

But, recurring from this digression to the actual condition of the hind, we proceed to exhibit a statement of his annual income and expenditure, derived from personal investigation. The following statement relates to the income and expenditure of a family residing in the parish of Chillingham, consisting of father, mother, and 6 children, the eldest of whom is 16 years of age, and the youngest 3 months.

<i>Yearly Income.</i>		<i>Yearly Expenditure.</i>	
Wages of Husband—Cash .	£4 0 0	Bread	£8 7 0
6 bushels Wheat at 6s. 6d. .	1 19 0	Flour	1 10 0
24 ,, Barley at 3s. 4d. .	4 0 0	Oatmeal	5 19 0
36 ,, Oats at 2s. 10d. .	5 2 0	Potatoes	6 0 0
12 ,, Beans at 4s. .	2 8 0	Cheese	1 0 0
1000 yards Potatoes, producing 48 bushels at 1s. 3d. .	3 0 0	Butter	1 14 8
Produce of Cow	13 3 10	Sugar	0 15 2
2 Pigs fed, average weight 4 cwt. at 2l.	8 0 0	Tea	0 10 0
Produce of Garden . . .	1 0 0	Coffee	0 8 6
Wages of Wife—say 20 days at harvest, at 2s. 6d. .	2 10 0	Milk	6 14 2
Wages of 1 son, 16 years .	16 0 0	Treacle	0 3 3
„ „ 12 „ „ .	7 16 0	Bacon	8 0 0
„ „ 10 „ „ partially employed .	2 12 0	Other flesh-meat . . .	1 0 0
Coals leading, valued at. .	2 0 0	Salt	0 6 0
House, valued at. . . .	2 10 0	Pepper	0 2 0
		Spices	0 1 6
		Tobacco	0 19 6
		Soap	0 6 0
		Candles	0 17 4
		Coals, 8 double loads at 9s. .	3 12 0
		Furniture	0 8 0
		Bedding	0 12 0
		Husband's Shoes. . . .	1 1 0
		Husband's Clothes . . .	2 17 9
		Son's Clothes, 16 years . .	3 18 9
		Two younger Boys' Clothes .	4 0 0
		Two girls' clothes . . .	3 0 0
		One ditto ditto	1 0 0
		Wife's ditto	2 10 0
		Price of 2 pigs bought in, and meal for them	2 15 0
		Schooling for children . .	1 12 6
		Books for ditto	0 7 0
		Seats at Meeting-house . .	0 8 0
		Beggars	0 2 6
		Spent at Fairs, &c., in Drink and Refreshments . . .	0 5 0
		House-Rent	2 10 0
Total	£76 0 10	Total	£75 13 7

In the preceding statement (wherein the expenditure balances the income all but 7s. 3d.) it will be observed that nothing is allowed for sickness, medicines, or other casualties, neither for depreciation or risk of capital (about 10*l.*) invested in the cow. If any calamity overtake the hind there must, therefore, be a curtailment of some of the items of expenditure, and a consequent abridgment of his comforts. The family from whom the previous estimate of income and expenditure has been derived were all well clothed and well fed, the wife being an uncommonly clever managing woman. From the circumstance of having 3 of their children at work they escaped the drawback of finding a bondager, which usually entails a loss upon the hind of 6*l.* or 7*l.* per annum, and their income and expenditure must be considered above an average. The income of a hind, who has no children able to work, whose wife only works at harvest, and who has to hire and maintain a bondager, may be considered as equivalent to 40*l.* 17s. 10d. per annum. It must, however, be borne in mind that this income is not all derived from the farmer, but a considerable part of it from the profitable application of the hind's capital and his wife's labour, in keeping a cow, feeding pigs, and growing potatoes. That portion of his income immediately derived from his employer, and which, in strictness, alone comes under the denomination of *wages*, appears to be this:—

Cash	£ 4	0	0
Corn	13	9	0
1000 yards of potatoes, manured, set, and taken up . . .	1	13	4
Cow's grass in summer, with hay and straw in winter . .	8	0	0
Garden, valued at	0	10	0
Cottage, at	2	10	0
Coals, leading, at	2	0	0
Wife's wages, for 20 days at harvest	2	10	0
	<hr/>		
	34	12	4
Loss by finding bondager	6	0	0
	<hr/>		
	£28	12	4

Equivalent to 11s. per week, which, by keeping a cow, feeding 2 pigs, growing potatoes, and cultivating a garden, is augmented to a sum equal to 15s. 6d. per week. This shews how much may be added to the comforts of the agricultural labourer, without injury to the farmer, by giving him an opportunity of thus employing his little capital and the labour of his family in producing some of the most important articles of food.

Another cause of the superior condition of the agricultural labourers in this district is to be traced to the wise and enlightened administration of the Poor Laws, which, long before the new Act came into operation, has characterised this portion of Northumberland. There have never been any labour-rates, and great jealousy has always existed against extending even a temporary and very moderate portion of relief to able-bodied labourers, when accidentally thrown out of employment. This has prevented dependence upon the poor-rates, and promoted reliance upon *themselves*, thereby fostering habits of providence and economy.

Another cause is to be found in the state of education and religious instruction. The register of marriages for the last 37 years, in the

parish of Chillingham, only shews the marks of three men who were unable to write their own names. The number of females, however, unable to write, was large (23); but this defect in education has, by the exertions of recent years, been in a considerable degree remedied.

In addition to the religious instruction of the parochial clergy, there are those of the dissenting denominations, who are numerous in this district. Most of the hinds are Presbyterians, and some of them travel several miles on a Sunday morning to the religious services of their meeting-house. Few of their houses are without a Bible and some popular religious books.

The last cause that we notice is their comparative isolation. Few of the hinds in this district live in villages, but are located in cottages around the farm-stead, and with the farmer form a colony of themselves. They are generally in a considerable degree detached from the world, have no near neighbours but their fellow-labourers; no beer-shops to resort to in the evenings. They have few temptations, and are moral almost from necessity. There are several villages in this district, but these are chiefly inhabited by tradesmen, mechanics, and day-labourers. This, however, does not so strictly apply to those villages upon the Duke of Northumberland's estate, as they possess a peculiar character in having allotments, varying from half an acre to five acres, attached to the cottages, which are let to the occupiers at low rents, who in various ways, as yearly servants and as day labourers, are employed upon the adjacent farms. The object of their noble proprietor in introducing this system was to render the labourer more independent of the farmer; to enable him to get quit of the bondage condition, and generally to improve his circumstances; and so far as it has been nicely adapted in its extent to the demand for labour in the surrounding district, there can be little doubt that it has answered the proposed intentions. This principle, in fact, seems to be the grand regulator of success; for if more allotments are apportioned to one place than are equivalent to the local demand for labour, a portion of their occupants must always be unemployed, and a general reduction of wages supervene. On comparing the condition of the cottager with an allotment to that of the hind, there appears no very decided difference; the hinds' cows, grass, hay, potatoe-land, and garden, as means of profit, being nearly equal to the average of the allotments, and the wages which both derive from the farmer are not very dissimilar. But contrast the case of the cottager who has an allotment, with that of the day-labourer without land, and the advantage in favour of the former is very great. To mechanics and handicraftsmen, whose employment is in some measure uncertain, an allotment is a great boon.

The wages of a day-labourer are from 10s. to 12s. per week, excepting in hay-time and harvest, when his earnings are considerably augmented. In harvest, efficient labourers can sometimes obtain as much as 18s. or 20s. per week with their victuals.

Upon tillage-farms the shepherds have the same corn as the hinds, and a number of sheep (varying with circumstances) kept in lieu of money. On stock-farms the shepherds are principally paid by the depasturing of sheep. Some of this class are the owners of several scores.

Crime.—The number of persons charged with criminal offences, and

committed for trial, in Northumberland, were, for the seven years ending 1820, 612; 1827, 570; 1834, 719. In the year 1837 the number was 189, or 1 in 1179 of the population. There are no means of ascertaining the proportion of these belonging to the northern division, but it is believed to be very small.

Increase of Population.—According to the population returns for 1831. the rate of increase since 1821, for the whole county was 12 per cent.; but, for the northern division separately, only $5\frac{1}{2}$ per cent. In those parishes of this district, containing towns and large villages, the rate of increase was 9 per cent., whereas in parishes entirely rural, the rate of increase was only 3 per cent. This strikingly exhibits the slow numerical progress of the population of a district solely agricultural, and indicates the small increase of labour applied to the culture of the soil within the ten years antecedent to 1831.

Longevity.—The influence of rural employment, combined with a simple mode of living and a pure invigorating atmosphere, upon the duration of life, is remarkably exemplified in the following extracts from the parish registers of Chillingham and Chatton:—

<i>Population of Chillingham.</i>		<i>Burials</i>	
1801	451	In 10 years ending 1810	17
1811	301	“ “ 1820	20
1821	356	“ “ 1830	25
1831	477	In 7 years ending 1837	22
1837	487		—
	2072	Add for Parishioners buried out of the Parish . . .	7
Average Population	414		—
			91
Average annual mortality, $2\frac{1}{2}$, equal to 1 in 165 of the population.			—

<i>Population of Chatton.</i>		<i>Burials</i>	
1801	1135	In 10 years ending 1810	123
1811	1378	“ “ 1820	134
1821	1460	“ “ 1830	124
1831	1632	In 7 years ending 1837	107
1837	1666		—
	7271		490
Average Population	1454		—

Average annual mortality, 13, equal to 1 in 112 of the population.

These will appear the more striking when compared with the vital statistics of Alnwick—a town nearly devoid of manufactures, where the poor are generally well employed, and in seasons of severity bountifully assisted:—

<i>Population of Alnwick.</i>		<i>Burials</i>	
1801	4719	In 10 years ending 1810	1152
1811	5426	“ “ 1820	1165
1821	5927	“ “ 1830	1201
1831	6788	In 7 years ending 1837	1032
1837	7358		—
	30,218		4550
Average Population	6043		—

Average annual mortality, 123, equal to 1 in 49 of the population.

In submitting these statistics of mortality we do not present them as an average of the district, but as the first that we have examined, and as opening up a field of enquiry rich in practical and beneficial results, at which we cannot now do more than glance. A portion of the difference between the ratio of mortality in towns and in rural districts is probably consequent upon increased mental excitement. But the principal efficient doubtless are, a less pure atmosphere; less exercise in the open air; a richer and more stimulating diet; and, above all, greater intemperance in the use of intoxicating liquors. These causes are happily capable of considerable modification and control; and when the inhabitants of towns become awake to their vital interests, these evils, with their fatal consequences, cannot fail to be diminished.

In the preceding summary, our object has been to bring the subject into view more in its prominent features than in its minute details, and to indicate obvious inferences rather than pursue them, leaving to the future, or to others, more ample and elaborate investigations. The subject, as bearing on human welfare, is one of deep interest, and the results of the previous enquiry are, upon the whole, of an encouraging and gratifying character. They exhibit a soil well cultivated under the vicissitudes and difficulties of a very variable climate, and a peasantry, who, in their general intelligence and moral habits, are a credit to themselves, an honour to the county, and an example worthy of imitation.

We have received permission to append to Mr. Hindmarsh's paper the following interesting statement by John Greg, Esq., of Dilston, in further illustration of the condition and character of the agricultural population of Northumberland. The author's position as agent to the Greenwich hospital estates in the north of England, and his long experience as an extensive practical agriculturist both in Northumberland and Scotland, well qualify him to give evidence upon the subject. The only necessary remark is that this statement was first given to the public in the year 1831, and that therefore the value of the grain, which forms a large proportion of the conditions of a hind, is now no longer the same, nor consequently the nominal or estimated amount of his earnings, although the quantity of food which he receives remains the same.

The manner of hiring and paying hinds, or farm-servants, who are householders, in the north of England, is as follows:—

Each man is provided with a cottage and small garden, upon the farm, free of rent, for himself and family; several of whom, in many cases, are engaged *for the year* upon the farm, as well as himself. The wages of the hind are chiefly paid *in kind*: those of his son or sons, if he has any able to work, either in money, or partly in money and partly in grain, as best suits his convenience: but it is generally an object with him to have such a proportion of the earnings of his family paid in kind as will keep him out of the market for such articles as meal, potatoes, cheese, bacon, milk, &c.; and, notwithstanding what the economists say about money being the only proper medium of exchange for labour, as well as other things, the custom of paying farm-labourers in kind works well for both master and servant. In times when grain sells at a high price, the conditions of the hind (as the labourer who

receives payment of his wages in kind is denominated) will cost his master more than the ordinary rate of wages for day-labourers at the same season; but on the other hand, in times of great depression, the conditions are the same, though, at such times, the farmer would be compelled to sell nearly double the produce to enable him to pay his labourers in cash. He has also a benefit in paying for his labour in an article, which otherwise would cause him some expense in sending to market, and in disposing of which he might incur the risk of making a bad debt with his corn-merchant.

The conditions of a hind (I adhere to the local terms) vary with the price of grain, from 30*l.* to 40*l.* a year, and, at the present prices, are as under:—

36 bushels of oats . . .	£6 12 0	24 pounds of wool . . .	£1 0 0
24 „ „ barley . . .	5 12 0	A cow's keep for the year.	9 0 0*
12 „ „ peas . . .	3 0 0	Cottage and garden . . .	3 0 0
3 „ „ wheat . . .	1 5 0	Coals carrying from the pit	2 0 0
3 „ „ rye . . .	0 15 0	Cash	3 10 0
36 „ „ potatoes, at } 1 <i>s.</i> 6 <i>d.</i> }	2 14 0	Total	£38 8 0

Each hind being bound to supply the labour of one woman (or boy), whenever the farmer requires it, at 1*s.* per day in harvest, and 8*d.* per day at other seasons. The other females of the family receive 10*d.* or 1*s.* a day, generally, and 2*s.* or 2*s.* 6*d.* in harvest.

The food of the peasantry in the north of England, as in Scotland, consisting chiefly of porridge made of oatmeal with milk, for breakfast, and bread, made of barley and pea-meal mixed, the above proportions are regulated to the demands of a family. Were the same mode adopted in the southern districts, although they could not probably get a more wholesome food, yet the kinds and proportions of grain would have to be regulated by the taste and habits of the people. These “conditions” are proved, in innumerable instances, to be adequate, under a proper economy (which economy the system has a tendency to produce), to the support of a man, his wife, and any ordinary number of children; for the eldest are probably earning, at the same time, from three or four to eight or nine shillings per week; and the joint produce of their labour, under the management of a frugal housewife, renders their cottage a scene of comfort and contentment. It often happens, indeed, that a hind with but few in family, has, at the end of the year, a good deal of corn to dispose of, for which, of course his master is always willing to give him the market-price.

The grain given to the hinds is always of the best that the farm produces. At the beginning of each quarter he is paid in advance a fourth part of his conditions. It is sent to one of the many small mills which abound in the country, and ground at a cheap rate into the different kinds of meal, and thus the intermediate profits of retail dealers, meal-sellers, and bakers, are saved to the consumer; and the corn, which cost the farmer 16*l.* to pay his hind, is more valuable to the latter than 20*l.* paid in money-wages, to be expended in stones of meal or quartern loaves at the end of each week. One very

* The cost of a cow's keep is usually valued at about 8*l.* to the master; but the value to the hind, or the amount which he would have to pay under ordinary circumstances, may be reckoned at 12*l.*—*Ed.*

obvious benefit arising to the hind from this mode of paying in kind, besides that of having a store of wholesome food always at command, which has not been taxed with the profits of intermediate agents, is the absence of all temptation, which the receipt of weekly wages, and the necessity of resorting to a village or town to buy provisions, holds out of spending in the ale-house some part of the money which ought to provide for the wants of the family; and to this circumstance, and to the domestic employment which their gardens afford in their leisure hours, we are probably much indebted for the remarkable sobriety and exemplary moral conduct of the peasantry of the north.

The produce of his garden, his small potatoes, and the refuse of his dairy, enable the hind to fatten two pigs in the year. The keep of a cow, supplied entirely by his master, consists of pasturage in summer, and a ton of hay, or an equivalent in turnips, and as much straw as he chooses in winter. This is reckoned to cost the farmer 9*l*.:* but if the cow be a good one, it is evident that the advantage must be much more than that to a family. The calf, if early in the season, sells for 40*s*., or thereabouts; if later, perhaps for 30*s*.; and if the good wife be a frugal manager, she will sell forty or fifty shillings' worth of butter,† besides an ample supply of milk and cheese for the use of the family. The wool received gives employment to the females to spin, and knit into stockings, in the winter evenings, or it is sent, after being spun into yarn, to be made into blankets. In this way habits of industry and economy are promoted, and domestic and social virtues engendered and preserved, in a manner and to an extent unknown in those districts where the younger members of a family are early driven from the shelter of their paternal roof and the control of a parent's eye; or where the parents, deserted by their children, are forced to take refuge, under the infirmities of age or the pressure of want, in the corrupting atmosphere of a parish workhouse. Look into one of our north-country cottages during a winter's evening, and you will probably see assembled the family group round a cheerful coal-fire,—which, by the way, is an inestimable blessing to all classes, but chiefly to the poor of this county, who enjoy an abundance of cheap fuel,—you will see the females knitting or spinning; the father, perhaps, mending shoes—an art which almost all acquire; and one of the young ones reading for the amusement of the whole circle; and contrast this with the condition of many young men employed as farm-servants in the southern counties, who being paid board-wages, club together to have their comfortless meal cooked in a neighbouring cottage, with no house to call their home, left to sleep in an out-house or hay-loft, subject to the contamination of idle companions, with no parent's eye to watch their actions, and no parent's voice to warn them of their errors; and say which situation is best calculated to promote domestic comfort, family affection, and moral rectitude.

The possession of a cow is to the northern hind an object of endeavour and ambition. He cannot marry and establish himself in life without one: at least, he knows that he ought not to marry till he can

* See the last note.

† This is understated. The value of butter sold is usually,* from 50*s*. to 100*s*. In one instance it has been known to amount to 8*l*.—*Ed*.

purchase one, and this is the first step towards independence that is generally aimed at, salutary alike as a check and a stimulus. This point gained, a cottage respectably furnished, and a situation obtained under a good master, he brings home his bride, feeling that he is a useful, and comparatively an independent man.

The situation of a hind living upon the premises, and hired for the year, possesses this decided advantage, that in seasons when employment is scarce, when day-labourers are turned adrift, however unproductive his services may be to his master, his wages go on; even months of confinement from ill health produce no diminution in his income;—and thus it is, that though his wages per day may seem but small, yet at the end of the year he is found in better circumstances than those artisans or labourers by the piece, who, though obtaining nominally higher wages, are liable to much loss of time and uncertainty of employment. It may seem hard, at first sight, that the farmer, whose servant, after having entered upon his service for a year, has fallen ill and become unable to work, should still have to make good his bargain; but such is the custom, and were it otherwise, the family would soon, in many cases, be thrown on the parish funds. The farmer may as well then take the chance of supporting his own for a while, as be compelled to contribute to the support of all who might fall into similar circumstances throughout the parish. But by far the best reason for the custom is, that it gives rise to a feeling of gratitude to a master for having afforded gratuitous relief, and a desire, which I have often heard expressed by servants, to make up for the loss he had sustained, by the best services they could bestow; and surely the sacrifice is not too great, if it saves an honest man from the feeling of degradation, which ought, and still sometimes does attend the application for parochial support.

This mode of engaging and paying farm-servants is not only more conducive to their welfare and social comfort than the weekly payment of money-wages, which go but a little way in purchasing the necessities for a family, are injudiciously laid out, and sometimes wastefully squandered—but it has, besides, a strong and apparent influence upon their habits and moral character; it possesses the advantage of giving to the peasant the use of a garden and a cow, with the certainty of employment; it gives him a personal interest in the produce of his master's farm, and a desire to secure it in good condition; it produces a set of local attachments, which often lead to connections, between master and servant, of long continuance. It is not a comfortable or convenient thing for a man to move from place to place, with his furniture and family;—and when he finds himself well situated, he has a strong inducement to conduct himself respectably, and give satisfaction to his employer: while, on the other hand, such removals, being attended with expense and loss of time to the farmer, who always sends his carts to bring the family and furniture of a new comer, it is his interest to encourage and retain a respectable servant, and thus mutual accommodation and respect are produced. Orderly habits and respectable conduct, on the part of the servants, produce consideration and kind treatment from their masters; and in this way the great majority of this class of our population come to the end of their days, without having once suffered the degradation of being on the list of parish paupers.

Perhaps the foregoing statements may be best proved, by annexing a list of the servants, being householders, at this time resident upon a considerable farm,* in Northumberland, with a table shewing the length of time that each has lived under the same master; and the sum of money that remained due to each at the half-yearly settlement of their accounts, at Martinmas last (11th November), being a surplus, arising from the labour of all the members of the families who remained at home, which they had not found it necessary to call for in the course of the half-year, but left in their master's hands, till the final settlement of the half-year's account:—

	Years' Service.	Cash due upon his account at Martinmas.		
		£.	s.	d.
George Cranston . . .	25	8	3	6½
Alexander Tunnah . . .	12	15	0	4½
John Redpath . . .	1	9	7	11½
Samuel Ewart . . .	30	5	5	9½
Archibald Gray . . .	9	7	11	4½
Archibald Elliott . . .	14	23	2	2
Thomas Robson . . .	4	4	3	11
James Cranston . . .	20	6	12	4½
Archibald Young . . .	12	7	2	5½
Edward Davison . . .	15	5	15	1
George Chirside . . .	10	5	16	7
John Middlemas . . .	3	4	9	10½
Thomas Fullerton . . .	18	in debt to his master 7 <i>l.</i> 9 <i>s.</i> 8 <i>d.</i>		

Average 13 years.

In the case of Thomas Fullerton, who, instead of having money due to him, stood indebted to his master in the sum of 7*l.* 9*s.* 8*d.*, it is necessary to remark, that he had had the misfortune to lose a valuable cow by death; and being unable to purchase another, having a large family, was obliged by his master with the loan of 10*l.*, to enable him to do so, which loan, it is understood, he is to pay off by instalments, or as he can afford; which, as his family grows up to be useful, he will have it in his power to do. The existence of this kind of confidence and accommodation may be adduced as one of the beneficial effects of the system herein explained. A master, in such case, frequently gives the servant the use of one of his cows until he can procure one for himself; but the servant is always anxious to have the credit of having a cow of his own, and it would be absurd not to give every encouragement to the maintenance of so laudable a spirit.

It may, further, be worthy of remark, that only two in the foregoing list ever received parochial aid—1, John Redpath, who was disabled, by illness, for working, for nearly three years; and George Chirside, whose

* In the township in which the farm referred to is situate, the poor's and county rates amount (this was written in the year 1831) to 1*s.* 3*d.* per pound per annum, on the rack-rent. The greatest portion of the poor's rate, however, is occasioned by the inhabitants of a village, containing some tradespeople and artisans, who obtain settlements by servitude or occupation; and a very small proportion, indeed, by the agricultural population. The writer never knew an instance of a regularly-hired farm-servant, or hind, applying for parochial aid in time of health, however large his family; and though, in the case of widows and orphans, assistance must be given, we would say, that in townships, where the population is purely agricultural, 6*d.* in the pound would cover, on an average, the amount of the poor's rate.

father died, leaving a widow and four very young children, of whom he was the eldest; but since the time that he was 16 years of age the whole family have been supported by their own industry. He was at first assisted by his master in the purchase of a cow, which is now cleared off, and the family are in good circumstances.

In contrasting the condition of the peasantry in the southern with that of the northern parts of the kingdom, it would be highly improper to pass over unnoticed the superior education of the latter, and the effect which is produced by it upon their worldly circumstances, as well as upon their moral and religious character. No greater stigma can attach to parents than that of leaving their children without the means of ordinary education, and every nerve is strained to procure it. In the school attached to almost every village, children are found not only able to read and write at a very early age, but most expert in all the common rules of arithmetic, and not unfrequently capable of extracting the square and cube root with great expedition and accuracy. And even the young men, who labour in the fields all the day, often spend a couple of hours in the evening in school, to advance themselves in such acquirements. If occupation alone is a valuable antidote against idle and vicious habits, the acquirement of useful knowledge and the cultivation of the mental faculties must be still more so. And when these are prosecuted, not by gratuitous means, but by the produce of economy and toil, it bespeaks a state of society where sobriety is habitual and intelligence is held in estimation.

A Short Account of the Darton Collieries Club. By THOS. WILSON, Esq., F.S.S.

[Read before the Statistical Section of the British Association, 23rd August, 1838.]

THE Society, of which I propose to give a short account, must be considered purely as an experiment—as an attempt to ascertain, in certain circumstances, on what terms a miner might ensure himself and his family a certain relief during sickness arising from accident.

Friendly societies, or associations for the relief of their subscribers, have been extensively popular with the working classes. Notwithstanding the great good which they have undoubtedly effected, it must still be a matter of regret that they are not based on sounder principles, and that they are not more fully adequate to the wants of their subscribers. It is not, however, intended to direct the attention of the Section to their defects in general; but I may be permitted to suggest that there is here a wide field for the statistician and philanthropist, to collect those facts which are necessary for placing friendly societies on a sound basis, and which, though they have been refused to the commands of the legislature, may be yielded to the importunities of neighbours and friends. It will be necessary only to point out two defects that friendly societies generally possess, as regards miners; in the first place, they often exclude that class altogether, and in the next place, from the high rate of subscription, the assistance of these clubs can be obtained only by heads of families, or at least by adults. Now every child that is employed about a mine is exposed to great dangers; it is therefore most desirable to provide assistance for the sufferer of this age, and to